

FORM PTO-1595

06-04

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U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
nCUBE Corporation	Name: Broadband Management Solutions LLC
	Address: 60 Decibel Road
Additional name(s) of conveying party(ies) attached? Yes	State College, Pennsylvania 16801
3. Nature of Conveyance:	
Assignment Merger	
☐ Security Agreement ☐ Change of Name ☐ Other	
Execution Date: December 31, 2004	Additional name(s) and address(es) attached? Yes No
4. Application number(s) or patent number(s):	
This document is being filed together with a new application	
A. Patent Application No.(s)	B. Patent No.(s)
PLEASE SEE ATTACHED ADDENDUM	PLEASE SEE ATTACHED ADDENDUM
Additional numbers atta	ached? Yes No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total applications and patents involved: 35
	7. Total fee (37 CFR 3.41): \$1,400.00
Customer Number	■ Enclosed
22850	☐ Authorized to be charged to deposit account
Tel. (703) 413-3000 Fax. (703) 413-2220	8. Deposit account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account)
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9. Statement and signature	
To the best of my knowledge and belief, the foregoing informat	ion is true and correct and any attached copy is a true
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Michael Monaco	ignature Date
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Registration Number: 52,041	
Total number of pages include	ding this cover sheet: 12
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Mail documents to be recorded with required cover sheet information to:

Director of the United States Patent and Trademark Office Mail Stop Assignment Recordation Services Alexandria, Virginia. 22313

ADDENDUM

4. (A) Application Numbers:

09/128,244 09/327,132 09/327,133 09/615,468 09/653,039 09/699,236 09/759,935 10/877,856 10/639,006 10/693,280 60/520,359 60/520,359 60/552,060 10/234,885 10/695,663

4. (B) Patent Numbers:

5,623,595 5,655,117 5,659,539 5,805,804 5,826,085 5,864,682 5,878,220 6,009,473 6,055,577 6,070,172 6,112,226 6,119,154 6,138,147 6,578,070 4,729,095 5,113,523 5,367,636 5,638,516
5,638,516
5,424,770
5,499,046
5,594,490

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ASSIGNMENT OF BUSINESS INTELLECTUAL PROPERTY

WHEREAS, nCUBE Corporation, a Delaware corporation ("nCUBE"), and Broadband Management Solutions, LLC, a Delaware limited liability company (hereinafter referred to as "ASSIGNEE") have entered into a certain Member Interest Purchase Agreement executed on October 20, 2004 (hereinafter the "AGREEMENT");

WHEREAS, nCUBE is either the sole and exclusive owner or a co-owner of all Business Intellectual Property (as that term is defined in the AGREEMENT, including but not limited to all intellectual property listed in Schedule 4.11(a) of the AGREEMENT; a copy of Schedule 4.11(a) is attached hereto as APPENDIX A);

WHEREAS, ASSIGNEE is desirous of acquiring the entire right, title and interest of nCUBE in and to all of said Business Intellectual Property, including but not limited to all applications for Letters Patent and Trademark registrations and trademark applications, the inventions and marks described therein, and in and to any and all trademark registrations and Letters Patents that may be granted therefor in the United States and its territorial possessions, including all rights to sue for all present and future infringement, and all infringement prior to the date of this assignment; and including the rights of nCUBE in the litigations between nCUBE and SeaChange as denoted in APPENDIX B, subject to the provisions set forth in the AGREEMENT ("SEACHANGE LITIGATIONS");

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00) and other valuable consideration, the receipt of which is hereby acknowledged, nCUBE by these presents does sell, assign and transfer unto said ASSIGNEE its entire right, title and interest in and to the aforesaid Business Intellectual Property, including but not limited to all applications for Letters

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Patent and Trademark registrations and trademark applications, and together with the goodwill connected with and symbolized by the trademarks, the inventions and marks described therein, and in and to any and all Trademark registrations and Letters Patents that may be granted therefor in the United States and its territorial possessions, in and to any and all divisions, continuations, reissues, substitutions and renewals thereof, including all rights to sue for all present and future infringement, and all infringement prior to the date of this assignment, and, pursuant to the provisions set forth in the AGREEMENT, its right, title and interest in and to the SEACHANGE LITIGATIONS.

nCUBE hereby authorizes and requests that the United States Patent and Trademark

Office in the United States and its territorial possessions issue any and all of said Letters Patents

or Trademark registrations, when granted, to said ASSIGNEE as the assignee of the entire right,

title and interest in and to the same, for the use and behoof of said ASSIGNEE, its successors

and assigns, to the full end of the term for which said Letters Patents and Trademark registrations

may be granted, with said ASSIGNEE having the sole right to renewals of the Trademark

registrations, as fully and entirely as the same would have been held by nCUBE had this

Assignment and sale not been made.

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Best Available Copy

IN TESTIMONY WHEREOF, NCUBE has caused these presents to be signed by its officers hereunto only authorized.

Date: Describer 31,200

B

Title: Chairman

APPENDIX A

Schedule 4.11(a)

Registered Intellectual Property; Liceuses

Туре	Number	Filing/Grant Dates	Title/Description	Locations	Comments
Granted	5,623,595	Filed: 9/26/94	METHOD AND APPARATUS FOR TRANSPARENT, REAL TIME RECONSTRUCTION OF CORRUPTED DATA IN A REDUNDANT ARRAY DATA STORAGE SYSTEM	US CAN GMBH UK	Jointly Owned with Thirdspace/Alcate
Granted	5,655,117	Filed: 9/24/96 Issued: 8/5/97	METHOD AND APPARATUS FOR INDEXING MULTIMEDIA INFORMATION STREAMS WITH A PORTABLE AND EXTENSIBLE FILE FORMAT	US UK	Jointly Owned with Thirdspace/Alcotel
Granted	5,659,539	Filed: 7/14/95 Issued: 8/19/97	METHOD AND APPARATUS FOR FRAME ACCURATE ACCESS OF DIGITAL AUDIO VISUAL INFORMATION	US CAN EPO	Jointly Owned with Thirdspace/Alcate)
Granted	5,805,804	Filed: 3/12/97 Issued: 9/8/98	METHOD AND APPARATUS FOR SCALABLE, HIGH BANDWIDTH STORAGE RETRIEVAL AND TRANSPORTATION OF MULTIMEDIA DATA ON A NETWORK	US	Jointly Owned with Thirdspace/Alcate!
Granted	5,826,085	Filed: 7/12/95 Issued: 10/20/98	OBJECT ORIENTED COMPUTER INTERFACE SUPPORTING INTERACTIVE NETWORKED APPLICATIONS	UŠ	Jointly Owned with Thirdspace/Alcatel
Granted	5,864,682	Filed: 5/21/97 Issued: 1/26/99	METHOD AND APPARATUS FOR FRAME ACCURATE ACCESS OF DIGITAL AUDIO-VISUAL INFORMATION	US CAN	Jointly Owned with Thirdspace/Alcatel
Granted	5,878,220	Filed: 11/4/97 Issued: 3/2/99	METHOD AND APPARATUS FOR STORING AND TRANSFERRING DATA ON A NETWORK	us	Jointly Owned with Thirdspace/Alcasel
Granted	6,009,473	Filed: 4/30/97 Issued: 12/28/99	USING CALLBACKS TO EFFECTIVELY MANAGE RESOURCES	US	Jointly Owned with Thirdspace/Alcasel
Granted	6,055,577	Filed: 5/6/96 Issued: 4/25/00	SYSTEM FOR GRANTING BANDWIDTH FOR NON-REAL TIME PROCESSES AND ASSIGNING BANDWIDTH FOR NON-REAL TIME PROCESSES	U\$	Jointly Owned with Thirdspace/Alcatel

Туре	Number	Filing/Grant Dates	Title/Description	Locations	Comments
			WHILE BEING FORECED TO PERIODICALLT RE-		
			ARBITRATE FOR NEW ASSIGNED BANDWIDTH		
Granted	6,070,172	Filed: 3/6/97 Issued: 5/30/00	ON-LINE FREE SPACE DE- FRAGMENTATION	US	Jointly Owned with Thirdspace/Alcatel
Granted	6,112,226	Filed: 11/22/97 Issued: 8/29/00	A METHOD AND APPARATUS FOR CONCURRENTLY ENCODING AND TAGGING DIGITAL INFORMATION FOR ALLOWING NON- SEQUENTIAL ACCESS DURING PLAYBACK	US JAPAN CAN AUS EPO HK	Jointly Owned with Thirdspace/Alcatel
Granted	6,119,154	Filed: 10/22/97 Issued: 9/12/00	METHOD AND APPARATUS FOR NON- SEQUENTIAL ACCESS TO AN IN-PROGRESS VIDEO FEED	US EPO JAPAN CAN AUS HK	Jointly Owned with Thirdspace/Alcatel
Granted	6,138,147	Filed: 10/22/97 Lesued: 10/24/00	METHOD AND APPARATUS FOR IMPLEMENTING SEAMLESS PLAYBACK OF CONTINUOUS MEDIA FELDS	US AUS EPO HK JAPAN CAN	Jointly Owned with Thirdspace/Alcasel
Granted	6,578,070	Filed: 7/13/99 Issued: 6/10/03	METHOD AND APPARATUS FOR IMPLEMENTING SEAMLESS PLAYBACK OF CONTINUOUS MEDIA FIEDS	UŠ	Jointly Owned with Thirdspace/Alcarel Previous application number 09/352/630
Application	09/128,244	Filed 8/3/98	DYNAMIC QUALITY ADJUSTMENT BASED ON STREAMING Constraints	US	Jointly Owned with Thirdspace/Alcatel
Application	09/327,132	Filed: 6/7/99	SYSTEM AND METHOD FOR SECURE DISTRIBUTION OF DIGITAL MEDIA TO A PLAYBACK LOCATION	US	Jointly Owned with Thirdspace/Alestel
Application	09/327,133	Filed: 6/7/99	SYSTEM AND METHOD FOR CONTROLLING PLAYBACK OF DIGITAL MEDIA IN A PLAYBACK LOCATION	US	Jointly Owned with Thirdspace/Alcatel
Application*	09/615,468	Filed: 7/13/00	DYNAMIC GENERATION OF VIDEO CONTENT FOR PRESENTATION BY A MEDIA SERVER	US KOR TAIW RUSS AUS VIETN BRAZ EPO MEX INDIA NZ CHINA SING HK CAN CHILE ISRAEL JAPAN	Jointly Owned with Thirdspace/Alcasel
Application	09/653,039	Filed: 9/1/00	DYNAMIC QUALITY ADJUSTMENT BASED ON CHANGING STREAMING CONSTRAINTS	US KOR TAIW RUSS AUS VIETN BRAZ EPO MEX INDIA N2 CHINA	Jointly Owned with Thirdspace/Alcatel

Туре	Number	Filing/Grant Dates	Title/Description	Locations	Comments
				SING CAN CHILE ISRAEL JAPAN	
Granted	4,729,095	Piled: 5/19/86 Issued: 3/1/99	BROADCAST INSTRUCTION FOR USE IN A HIGH PERFORMANCE COMPUTER SYSTEM	US	nCUBE - Colley
Granted	5,113,523	Filed: 5/6/85 Issued: 5/12/92	HIGH PERFORMANCE COMPUTER SYSTEM	US GMBH FRANCE ITALY JAPAN UK	nCUBE - Colley
Granted	5,367,636	Filed: 11/1/93 Issued: 11/22/94	HYPERCUBE PROCESSOR NETWORK IN WHICH THE PROCESSOR INDENTIFICATION NUMBERS OF TWO PROCESSORS CONNECTED TO BACH OTHER THROUGH PORT NUMBER N, YARY ONLY IN THE NTH BIT	us	nCUBE - Colley, Kenoyer
Granted	5,638,516	Filed: \$/1/94 Issued: 6/10/97	PARALLEL PROCESSOR THAT ROUTES MESSAGES AROUND BLOCKED OR FAULTY NODES BY SELECTING AN OUTPUT PORT TO A SUBSEQUENT NODE FROM A PORT VECTOR AND TRANSMITTING A ROUTE READY SIGNAL BACK TO A PREVIOUS NODE	US EPO JAPAN KOR AUS CAN	nCUBE - Duzett
Granted	5,424,770	Filed: 9/15/94 Issued: 6/13/95	METHOD AND APPARATUS FOR AUTOMATIC INSERTION OF A TELEVISION SIGNAL FROM A REMOTE SOURCE	US	nCUBE - Schmelzer Ad Insertion Tech - Sky/Connect
Cranted	5,499,046	Filed: 5/23/94 Issued: 3/12/96	CATV DISTRIBUTION SYSTEM WITH EACH CHANNEL HAVING ITS OWN REMOTE SCHEDULER	US	nCUBE - Schiller/Schmelzer Ad Insertion Tech - SkyConnect
Granted	5,594,490	Filed: 5/23/94 Issued: 1/14/97	SYSTEM FOR DISTRIBUTING VIDEO/AUDIO FILES FROM CENTRAL LOCATION TO A PLURALITY OF CABLE HEADENDS	US	nCUBE ~ Dawson/Schiller/S chmelzer Ad Insertion Tech - SkyConnect
Application	09/699,236	Filed: 10/27/00	ADAPTIVE BANDWIDTH SYSTEM AND METHOD FOR BROADCAST DATA	US SING AUS HK BRAZ CAN CHINA CHINA CHILE EPO ISRAEL JAPAN KOR NZ	nCUBE - Sheeran

Туре	Number	Filing/Grant Dates	Title/Description	Locations	Comments
Application	09/759,935	Filed: 1/12/01	METHOD AND APPARATUS FOR IDENTIFYING A SIGNAL ROUTE FOR DELIVERY OF VIDEO- ON-DEMAND TO A SUBSCRIBER TERMINAL	US AUS BRAZ CAN CHILE CHINA EPO ISRAEL JAPAN KOR MEX NZ SING	nCUBE - Schiller/Poole
Application	10/877,856	Filed: 6/25/2004	SYSTEM AND METHOD FOR DELIVERING	U\$	nCUBE - Schiller
		1	VIDEO PROGRAMS TO A VIDEO DISTRIBUTION		1
			CENTER		
Application	10/639,006	Flied: 8/11/2003	OPTIMAL PROVISIONING AND MANAGEMENT	US	nCUBÉ -
		} [OF BANDWIDTH IN A VIDEO ON DEMAND	PCT	Matarese
			SERVICES ARCHITECTURE		
Application	10/693/280	Filed: 10/23/2003	A SYSTEM AND METHOD FOR PROVIDING	US	nCUBE - Czech
	:		ADVERTISING AFTER A VIDEO PROGRAM HAS		
			BEEN PAUSED		
Prov Appl.	60/520,359	Filed 11/13/2003	MÉTHOD AND MECHANISMS FOR EFFICIENT,	ÜŜ	nCUBE -
			SCALABLE DELIVERY OF INTERACTIVE		Aaby/Parker
			PROGRAM DATA		
Prov Appl.	60/552,060	Filed 3/9/2004	ADVERTISING INSERTION AND VIDEO ON	US	nCUBE - Schiller
			DEMAND		
Application	TBA	Filed: 4/26/2004	CACHE MEMORY FOR A SCALABLE	US	nCUBE - Duzen
			INFORMATION DISTRIBUTION SYSTME	PCT	
Application*	10/234,885	Filed 9/3/2002	DIGITAL MESSAGE INSERTION TECHNIQUE	US CL	nCUBE
			FOR ANALOG VIDEO SERVICES	TW	
Application*	10/693,663	Filed 10/29/2003	METHOD FOR PROVIDING TRIGGERED EVENT	US	nCUBE / ACTV
			COMMANDS VIA DIGITAL PROGRAM		
			INSERTIONS SPLICING]

^{*}Indicates that the Application has been or, prior to Closing, will be, abandoned by Seller.

Seller will not maintain these applications as pending pursuant to Section 10.1(b) of the Purchase Agreement.

<u>Trademarks</u>: U.S. Trademark Applications and Registrations

Trademark	App. No.	Filing Date	Reg. No.	Reg. Date	Status/Comments
N4	78/039480	15-Dec-2000	2757421	26-Aug-2003	Registered. Section 8 & 15 Affidavits of Use and Incontestability due by August 26, 2009.
N5	78/039482	15-Dec-2000			Pending.
N6	78/039485	15-Dec-2000			Pending.
NCUBE	73/711880	16-Feb-1988	1745549	12-Jan-1993	Registered.
					Renewal due by January 12, 2013.
nCUBE (Stylized)	74/253165	09-Mar-1992	1732719	17-Nov-1992	Registered.
nCUBE					Renewal due by November 17, 2012.
SKYCONNECT	74/546487	01-Jul-1994	1918373	12-Sep-1995	Registered,
					Renewal due by September 12, 2005.
VIRTUAL INTERCONNECT	76/397528	19-Apr-2002	2828678	30-Mar-2004	Registered. Supplemental Register. Section 8 Affidavit of Use due by March 30, 2010.

Foreign Trademark Registrations

Country	Trademark	App. No.	Filing Date	Reg. No.	Rog. Date	Status/Comments
Australia	NCUBE (Stylized)	614313	20-Οσ-1993	A614313	25-Jul-1995	Renewal due by October 20, 2010.
Australia	NCUBE	586235	09-Sep-1992	A586235	30-May-1995	Renewal due by September 9, 2009.
Canada	NCUBE	795306	19-Oct-1995	TMA463064	06-Sep-1996	Renewal due by September 6, 2011.
France	NCUBE (Stylized)	92431218	20-Ang-1992	92431218	29-Jan-1993	Renewal due by August 20, 2102.
Germany	INFOCUBE	39553000	30-Dec-1995	39553000	15-Jul-1996	Renewal due by December 30, 2005.
Germany	NCUBE (Stylized)	25021/9	21-Jul-1992	2058894	04-Mar-1993	Renewal due by July 21, 2012,
ltaly	NCUBE (Stylized)	RM92C/003	07-Aug-1992	643872	28-Fcb-1995	Renewal due by August 7, 2012
Korea, Republic	NCUBE (Stylized)	20575/1992	24-Jul-1992	282662	04-Jan-1994	Renewal due by January 4, 2014
South Africa	NCUBE (Stylized)	94/1553	15-Feb-1994	94/1553	15-Fcb-1994	Renewal due by February 15, 2014.

Country	Trademark	Арр. №.	Filing Date	Reg. No.	Reg. Date	Status/Comments
United Kingdom	NCUBE (Stylized)	1507140	09-Mar-1992	1507140	06-Oct-1995	Renewal due by March 9, 2009.
United Kingdom	INFOCUBE	2050301	04-Jan-1996	2050301	13-Jun-1997	Renewal due by January 4, 2006.
United Kingdom	MEDIACUBE	2050300	04-lan-1996	2050300	01-Nov-1996	Renewal due by January 4, 2006.

U.S. Copyright Registrations

Title	Description	Registration No.	Registration Date
TESS 2	4 semiconductor chips in housings & 11 plots.	MW6310	16-Mar-1989
Ncube 3 Processor B- Step	4 semiconductor chips in housings, 12 plots & col. composite plot.	MW12882	05-May-1997
Ncube 3 Processor C- Step	4 semiconductor chips in bousings, 12 plots & 2 col. composite plots.	MW12883	05-May-1997
VC2644	4 semiconductor chips & plots of 9 layers.	MW2928	17-July-1987

Joint Patent Ownership Agreement by and between nCUBE Corporation and Thirdspace Living Ltd., dated October 4, 2000

See also the agreements listed on Schedule 4.11(d).

APPENDIX B SEACHANGE LITIGATIONS

SeaChange International, Inc., v. nCube Corporation U.S.D.C., District of Delaware, Civil Action No. 00-568-JJF.

SeaChange International, Inc. v. nCube Corporation, C.A.F.C. Case No. 04-1375, -1498.

nCube Corporation v. SeaChange International Inc., U.S.D.C., District of Delaware, Civil Action No. 01-11-JJF.

nCube Corporation v. SeaChange International, Inc., C.A.F.C. Case No. 03-1341, -1366.

nCube Corporation v. SeaChange International, Inc. U.S.D.C., District of Delaware, Civil Action No. 02-228-JJF.



GENERAL POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE

l hereby a	ppoint:	
Practi	tioners associated with the Customer Number	22850
connection	(s) or agent(s) to represent the undersigned before the with any and all patent applications assigned only to assignment documents attached to this form in accordance.	the United States Patent and Trademark Office (USPTO) in the undersigned according to the USPTO assignment dance with 37 CFR 3.73(b).
Assignee I	Name and Address:	
60 Decibel	d Management Solutions LLC I Road ege, Pennsylvania 16801	
A stateme	ent under 37 CFR 3.73(b) is attached.	
A stateme	ent under 37 CFR 3.73(b) is attached. SIGNATURE OF ASSIC The individual whose signature and title is supplied be	
A stateme	SIGNATURE OF ASSIC	
	SIGNATURE OF ASSIG	clow is authorized to act on behalf of the assignee



STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: David CZECK	
Application No./Patent No.: 10/693,280 SYSTEM AND METHOD FOR PROVIDING ADVERTISE Entitled: PAUSED	Filed/Issue Date: October 23, 2003 SING AFTER A VIDEO PROGRAM HAS BEEN
	Liability Company f Assignee, e.g., corporation, partnership, government agency, etc.)
States that it is:	
1. the assignee of the entire right, title, and interest; or	
2. an assignee of less than the entire right, title and interest. The extent (by, percentage) of its ownership interest is	%
in the patent application/patent identified above by virtue of an assig application/patent identified above. A copy of the assignment is atta	
The undersigned (whose title is supplied below) is authorized to act	on behalf of the assignee.
Muchael Muria	3/23/05
Signature	Date
Michael E. Monaco	703-413-3000
Printed or Typed Name	Telephone Number
52,041	
Registration Number	



Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Application Number	10/693,280
Filing Date	October 23, 2003
First Named Inventor	David CZECK
Art Unit	2611
Examiner Name	
Attorney Docket Number	267654US28

Please change the Correspondence Address for the above-identified patent application to:	
The address associated with Customer Number: 22850	
am the:	
☐ Applicant/Inventor	
Assignee of record of the entire interest. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	
Attorney or agent or record. Registration Number <u>52,041</u> .	
Registered practitioner named in the application transmittal letter in an application without an Executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number	
Signature Vicker Viene	
Typed or Printed Name	
lichael E. Monaco	
Telephone 703-413-3000	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.	
*Total of forms are submitted.	